



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/649,881	08/28/2003	Shigemasa Hirooka	116283	7835
25944	7590	09/08/2004	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			TRAN, BINH Q	
			ART UNIT	PAPER NUMBER
			3748	

DATE MAILED: 09/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/649,881

Applicant(s)

HIROOKA, SHIGEMASA

Examiner

BINH Q. TRAN

Art Unit

3748

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6 and 8-12 is/are rejected.
- 7) ☒ Claim(s) 5 and 7 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>09/03/2004</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claims 1-4, 6, and 8-12 are rejected under 35 U.S.C. 102 (b) as being anticipated by Ishizuka et al. (Ishizuka) (Patent Number 6,050,086).

Regarding claims 1 and 8, Ishizuka discloses internal combustion engine (1) comprising: an air pump (17) that supplies secondary air to an upstream side of an exhaust gas control catalyst (e.g. 4A, 4B, 5) in an exhaust pipe (3) via a secondary air supply passage; an adjusting device that adjusts an intake air amount delivered into a combustion chamber from an intake pipe; and a controller that performs control for increase correction of the intake air amount adjusted by the adjusting device when the air pump performs an operation of supplying the secondary air (e.g. See col. 2, lines 60-67; cols. 3-5, lines 1-67; col. 6, lines 1-10).

Regarding claims 2 and 9, Ishizuka further discloses that the controller performs control for the increase correction of the intake air amount adjusted by the adjusting device when the air

Art Unit: 3748

pump performs the operation of supplying the secondary air during idling immediately after the internal combustion engine is started (e.g. See col. 2, lines 60-67; cols. 3-5, lines 1-67; col. 6, lines 1-10).

Regarding claims 3 and 10, Ishizuka further discloses that the performs control for the increase correction of the intake air amount adjusted by the adjusting device when the air pump performs the operation of supplying the secondary air while the internal combustion engine is warmed-up (e.g. See col. 2, lines 60-67; cols. 3-5, lines 1-67; col. 6, lines 1-10).

Regarding claims 4, 6, and 11-12, Ishizuka discloses a control apparatus for an internal combustion engine (1) for a vehicle, comprising: an adjusting device that adjusts an intake air amount delivered into a combustion chamber from an intake pipe; a recognizing device that recognizes whether or not secondary air is to be supplied; a vehicle speed detector that detects a vehicle speed (16); and a controller (10) that derives an increase correction amount for increasing the intake air amount delivered into the combustion chamber from the intake pipe using a first process when the recognizing device recognizes that the secondary air is to be supplied and the vehicle speed detector detects that the vehicle speed is 0 (Idling Speed) (e.g. See col. 3, lines 4-58), and derives an increase correction amount for increasing the intake air amount using a second process which is different from the first process when the recognizing device recognizes that the secondary air is to be supplied and the vehicle speed detector detects that the vehicle speed is not 0, and that gives instruction to the adjusting device such that the intake air amount is increased by the derived increase correction amount (e.g. See col. 3, lines 4-58).

Allowable Subject Matter

Claims 5 and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Since allowable subject matter has been indicated, applicant is encouraged to submit formal drawings in response to this Office action. The early submission of formal drawings will permit the Office to review the drawings for acceptability and to resolve any informalities remaining therein before the application is passed to issue. This will avoid possible delays in the issue process.

Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure and consists of three patents:

Yoshizaki et. al. (Patent Number 5537321), Shoji et. al. (Patent Number 5706653), and Yoshizaki (Patent Number 5235956) all disclose an exhaust gas purification for use with an internal combustion engine.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Binh Tran whose telephone number is (703) 305-0245. The examiner can normally be reached on Monday-Friday from 8:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion, can be reach on (703) 308-2623. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0861.

BT
September 03, 2004

A handwritten signature in black ink, appearing to read 'Binh Tran', with a long horizontal flourish extending to the right.

Binh Tran
Patent Examiner
Art Unit 3748